

# Notice of Allowability

Application No.

10/714,439

Examiner

Marc S. Zimmer

Applicant(s)

DILLON, MARK E.

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

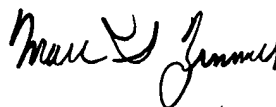
1. ☒ This communication is responsive to 11/14/05.
2. ☒ The allowed claim(s) is/are 1-8, 13-19 and 21-27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**MARC S. ZIMMER**  
PRIOR EXAMINED

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Frank Bonini on January 23, 2006.

The application has been amended as follows:

Please cancel claims 9-12 and 20.

Applicant elected without traverse the claims of group I, claims 1-8, 13-19, and 21-27. Insofar as these claims are now in condition for allowance, and because Applicant has offered no reasons as to why the Examiner's restriction was improper, the non-elected claims are hereby cancelled.

### ***Response to Amendment/Arguments***

The prior art rejections over *Zehnder* are hereby withdrawn in view of the amendments and remarks made in Applicant's correspondence dated November 14, 2005 as are the rejections under 35 U.S.C. 112, first paragraph.

### ***Allowable Subject Matter***

The aspects of the claimed process that distinguish the instant process over related processes of the prior art are, in the Examiner's estimation: (i) that the impregnating polymer composition is introduced into the voidspace of the microporous membrane by first casting it onto a carrier substrate and then mating together surfaces

Art Unit: 1712

of the carrier substrate and membrane (this, as opposed to coating the impregnating polymer material directly on the surface of the membrane) and (ii) that both sides of a microporous membrane are bonded to other layers using only a single application of bonding material and in a single pass operation.

It is known in the prior art to adhere a permeable material to another layer by applying to the permeable material on the side *opposite* the side that contacts the additional layer a bonding compound and promoting the impregnation of the permeable material with said bonding compound so that it passes completely through and reaches the surface of said additional layer. The bonding compound is then allowed to cure thereby creating a robust bond between the permeable layer and additional layer. See, for instance, Barnes, GB 2155851 A and Pall et al., U.S. 5,919,330. It is notable, however, that, whereas the instant invention calls for the impregnating material to be first coated on a substrate and subsequently the substrate is mated with the permeable/porous membrane, these references only contemplate coating the impregnant directly onto a surface of the permeable material.

Hamazaki et al., JP 61-40328 is cited as being of interest because they disclose the impregnation of porous PTFE with a silicone rubber-forming composition as it done in the instant invention.

In no case does the prior art disclose a process entailing all of (i) casting a bonding material onto a carrier substrate, (ii) mating the coated surface with the surface of a porous membrane, (iii) promoting the impregnation of the coating material into porous membrane to the extent that it passes through to the opposite surface, and (iv)

Art Unit: 1712

laying a backing sheet over the membrane on the side opposite the carrier substrate so that, when the multilayered article is passed once through an oven, bonds are formed between all of the substrate, membrane, and backing sheet.

It is acknowledged that the processes of claims 13 and 21 differ from that of claim 1 in that the backing layer is already laminated to the porous membrane prior to mating the second surface of said membrane and the coated side of the carrier substrate. Nevertheless, the closest prior art known to the Examiner does not feature this approach for introducing the impregnant. Indeed, the composites taught by Barnes and Pall do not contain any layer that corresponds to the carrier substrate of the instant invention.

Accordingly, claims 1-8, 13-19, and 21-27 are considered allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

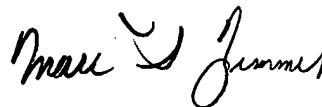
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1712

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 23, 2006

A handwritten signature in black ink, appearing to read "Marc S. Zimmer". The signature is fluid and cursive, with the first name "Marc" and last name "Zimmer" clearly distinguishable.

**MARC S. ZIMMER  
PRIMARY EXAMINER**